======= WPI =======

TI - Fabry-perot type semiconductor laser used in optical FDM communication system - in which barrier layers in carrier injection area acts as horizontal waveguide only for TM mode light but not for TE mode light

AB - J09199806 The semiconductor laser has a carrier injection area, which is divided into three parts. An ordered quantum well barrier layer (2) and a disordered quantum well barrier layer (3) are formed in the carrier injection area. The barrier layers of first area acts as a horizontal waveguide only for TM mode light but not for TE mode light in non-current injection state.

- The barrier layers of the other area acts as a horizontal waveguide only for TE mode light, but not for TM mode light.
- USE/ADVANTAGE - In optical communication system especially in optical FDM translation. Enables to control polarised wave mode of laser oscillations, by varying amount of carrier injections.
- (Dwg.1/34)

PN - JP9199806 A 970731 DW9741 H01S3/18 015pp
PR - JP960023176 960116
PA - (CANO ) CANON KK
MC - U12-A01B1B V07-F01A5 V07-K01A V08-A01A V08-A04A W02-C04A1D W02-C04B1A W02-C04B4B
DC - P81 U12 V07 V08 W02
IC - G02F1/015 ;H01S3/103 ;H01S3/18 ;H04B10/02 ;H04B10/28
AN - 97-441481 [41]

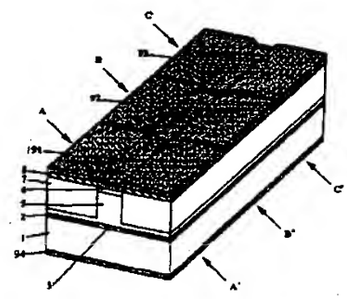
======= PAJ =======

TI - POLARIZABLE AND MODULATABLE SEMICONDUCTOR LASER, LIGHT SOURCE USING THE SAME AND OPTICAL COMMUNICATION DEVICE

AB - PROBLEM TO BE SOLVED: To obtain a highly productive semiconductor laser with which the polarization mode of laser oscillation can be controlled by the amount of current injection.

- SOLUTION: A semiconductor laser has three or more divided current injection regions. At least one of the current injection regions has active layers 2 and 3 in a non-current injection state which form a refractive index waveguide structure of horizontal direction against a TM mode light, and they do not form the refractive index waveguide structure of horizontal direction against the TM mode light. At least one of other current injection regions has the active layers 2 and 3 in a non-current injection state which do not form a refractive index waveguide structure of horizontal direction against the TM mode light.

PN - JP9199806 A 970731
PD - 97-07-31
ABD - 971128
ABV - 097011
AP - JP960023176 960116
PA - CANON INC
IN - NAKANISHI MASAHIRO
I - H01S3/18; G02F1/015; H01S3/103; H04B10/28; H04B10/02



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